

Summary of the Second Safety Audit at General Chemical Corporation Bay Point Works 501 Nichols Road, Bay Point

Introduction

Contra Costa Health Services (CCHS) conducted a second comprehensive safety audit/inspection of the programs, policies, and procedures developed by General Chemical Bay Point Works (BPW) located at 501 Nichols Road, Bay Point. This safety audit was conducted in Fall 2003. This safety audit was performed to assess compliance with the California Accidental Release Prevention (CalARP) Program and the more comprehensive Contra Costa County's Industrial Safety Ordinance (ISO) Safety Program.

During a comprehensive safety audit, CCHS reviews safety elements that are addressed by more than 470 questions. The CCHS 2003 safety audit at General Chemical resulted in 101 corrective actions for General Chemical BPW to implement and 12 recommended items (items that are not required but may assist in accident prevention). The safety program elements that were identified to have significant deficiencies included programs related to management systems, process/equipment issues, and the County ISO requirements.

Management System

The safety programs related to the management system that were identified to have significant deficiencies included

- **Management Oversight:** Staff members with sufficient expertise were not assigned the responsibility to oversee compliance with the human factors program requirements (addressing issues related to possible human errors). Time and resources were not allocated to address each safety program element. A baseline has not been specifically developed to measure the effectiveness of the safety program elements (i.e., risk management program elements, human factors program, root cause analysis and incident investigations and accident history).
- **Changes in Process and Equipment:** A tracking system was not in place to ensure that temporary changes are completed when designated or how and when the change can be extended.
- **Compliance audit:** BPW did not complete an independent compliance audit of the entire provisions of CalARP regulation and the ISO program safety programs on a timely basis. The facility had not established a policy/procedure/form to formally verify that corrective action items documented to correct deficiencies from audits, PHAs, etc. are valid.
- **Contractor Safety:** BPW did not obtain and evaluate information regarding the contract owner or operator's safety performance and programs when selecting a contractor. BPW did not have an auditing process that periodically examines and verifies that each contract employee is trained by the contract owner in the work practices necessary to safely perform his or her job and is instructed in the known potential fire, explosion, or toxic release hazards related to his or her job and the process.
- **Emergency Response:** The emergency response plan did not include documentation of proper first aid and emergency medical treatment necessary to treat accidental human exposures and written information was not readily available to be provided to the medical facility treating the exposed personnel. The plan did not ensure that the description of emergency response equipment includes when the equipment will be used in an emergency.

Process/Equipment issues

The safety programs related to process/equipment that were identified to have significant deficiencies included:

- **Mechanical Integrity:** A program was not in place to address and eliminate backlog items in a timely fashion.

- **Process/Equipment safety information:** Documentation of safety information did not include all of the required safety information such as that for relief system design and design basis.
- **Process Hazard Analysis (PHA):** Documents reviewed did not clearly indicate that incidents that had a likely potential for catastrophic consequence were considered. The facility had not established a system to communicate the analysis results to employees whose work assignments are in the process and who may be affected.
- **Operating Procedures:** These procedures needed additional clarification to provide clear instructions for safely conducting activities associated with a given process. The operating procedures were not consistent with safety information for all processes. All procedures did not consistently address start-up following an emergency or turnaround and emergency shutdown. Personnel did not have easy access to computers for quick reference to operating procedures prior to elimination of hard copies. There was not a certification procedure for annually certifying that the operating procedures are current and accurate.

Industrial Safety Ordinance (ISO) Requirements

Additionally, the industrial safety ordinance (ISO) requires the facility to identify latent conditions (review of signs of hidden problems that could lead to possible significant incidents). The safety audit identified significant deficiencies in: implementing latent conditions reviews; addressing, ensuring and documenting that management of organizational changes are properly reviewed (to ensure responsibilities for addressing safety elements and emergency response are clearly defined); encouraging employee participation in addressing and reviewing documentation related to safety elements; and addressing inherently safer systems/design in the existing and new processes (look for ways to reduce the hazard and make the process safer).

Follow-up Safety Program Activities

CCHS has recently completed their third safety audit at General Chemical Bay Point (Audit conducted in August-September 2005). CCHS is very concerned about getting General Chemical Bay Point Works into compliance. General Chemical has agreed to the following actions:

- Conduct an internal Safety Culture Survey
- Apply lessons learned from the third party Safety Culture and Management System Evaluation that was completed for the Richmond Work Facility to the Bay Point Works facility.
- Develop an action plan for implementation of the actions identified from the 2005 CCHS safety audit that integrates the actions outstanding from the 2003 audit. BPW will review with CCHS staff the progress in aggressively implementing these actions. BPW will submit an updated master schedule on a monthly basis and there will be a follow-up meeting on a monthly basis with CCHS to review the master schedule and the status of the actions completed.

Additional Information

For more information, call 925-646-2930 or logon to cchealth.org. To review the complete safety audit report, visit Bay Point Library at the Riverview Middle School, 205 Pacifica Avenue, Bay Point, CA 94565 or call 925-646-2286 for an appointment.